Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

RECORDS OF MEETINGS.

One thousand and eighty-third Meeting.

OCTOBER 8, 1919.—STATED MEETING.

The Academy met at its House at 8.15 P. M.

The PRESIDENT in the Chair.

Ninety-three Fellows and five guests were present.

The Corresponding Secretary presented the following letters:—from A. A. Blanchard, H. N. Brown, F. H. Fay, P. E. Goddard, R. K. Hack, C. D. Hazen, F. G. Keyes, Joseph Lipka, G. A. Miller, J. B. Moore, F. R. Moulton, Edward Mueller, C. L. Nichols, Raymond Pearl, W. T. Schaller, H. D. Sedgwick, Virgil Snyder, Winslow Warren, R. S. Williams, and A. G. Woodman, accepting Fellowship; from Charles Barrois, J. J. C. Joffre, H. L. Le Chatelier, G. H. F. Nuttall, W. H. Perkin, Raymond Poincaré and G. W. Prothero, accepting Foreign Honorary Membership.

The Corresponding Secretary reported for the Council that E. V. Huntington had resigned as member of the Committee of Publication, and that the Council had authorized the President of the Academy to appoint a committee of three to present a name to fill the vacancy.

The President announced the death of the following Fellows and Foreign Honorary Members: William Brewster, Class II., Section 3; Walter Gould Davis, Class II., Section 1; William Gilson Farlow, Class II., Section 2; Francis Barton Gummere, Class III., Section 4; Abraham Jacobi, Class II., Section 4; William Roscoe Livermore, Class I., Section 4; Charles Herbert Williams, Class I., Section 2; Emil Fischer, Class I., Section 3; Magnus Gustav Retzius, Class II., Section 3; John William Strutt, Baron Rayleigh, Class I., Section 2.

A biographical notice of Charles Richard Van Hise by J. E. Wolff was presented.

The following Communications were presented:—

Professor Elihu Thomson. "Progress in Knowledge of Nature's Electricity."

Dr. William Roscoe Thayer. "The 'Union Académique.'"

On motion of C. H. Moore and after discussion it was

Voted, That a Committee be appointed to consider and report on the proposed American Council of Learned Societies devoted to Humanistic Studies.

The President appointed as this Committee: C. H. Haskins (chairman), Arthur Fairbanks, Kirsopp Lake, C. B. Gulick, C. R. Lanman and W. R. Thayer.

The Meeting was then dissolved.

One thousand and eighty-fourth Meeting.

NOVEMBER 12, 1919.— STATED MEETING.

The Academy met at its House at 8.15 P. M.

The PRESIDENT in the Chair.

Forty-four Fellows and five guests were present.

The Transactions of the last Meeting were read and approved.

The Corresponding Secretary presented letters from C. H. Brent, W. S. Franklin, W. H. Holmes, accepting Fellowship; from E. B. Spear, declining Fellowship; from G. M. Allen resigning Fellowship; from Ferdinand Foch, and A. A. Macdonell, accepting Foreign Honorary Membership.

The Corresponding Secretary announced the receipt of letters and other documents from the papers of Chief Justice Lemuel Shaw, the gift of Mr. Shaw's granddaughter, Josephine MacC. Shaw.

A biographical notice of Charles Card Smith by Arthur Lord was presented.

The Corresponding Secretary reported the action of the Council appointing Professor Louis Derr Chairman of the Committee of Publication in place of Professor E. V. Huntington resigned.

The President directed the attention of the Fellows present to Chief Justice Shaw's diploma of membership in the Academy, dated November 12, 1824.

The President made mention of the important services of Professor E. V. Huntington as Chairman and Professor A. A. Howard as Acting Chairman of the Committee of Publication, and it was

Voted, That the thanks of the Academy be sent to Professor Huntington and Professor Howard for their valued and generous labors in connection with this Committee.

The President announced that at a date in the near future an open meeting would be held in accordance with the plan adopted by vote of the Council, March 12, 1919.

The Recording Secretary presented letters received during the summer from the French Academy, inviting to participation in the "Union Académique"; and from the Académie de Metz, expressing happiness at liberation from German control, and inviting to representation at a Solemn Session on June 12, 1919.

The following Communications were presented and discussed:

Professor C. H. Grandgent. "Trills."

Dr. Harvey Cushing. "Some of the Problems of the Neuro-Surgeon arising from Battle Casualties."

The Meeting was then dissolved.

One thousand and eighty-fifth Meeting.

DECEMBER 6, 1919.— OPEN MEETING.

An Open Meeting was held from four to six o'clock in accordance with the vote of March 12, 1919.

The PRESIDENT in the Chair.

There were about 270 Fellows and guests including ladies present.

Dr. Thomas Morison Legge of London spoke on Stained Glass Windows of French and English Cathedrals with illustrations from lantern slides in the natural colors made by the late Lieut. Hugh Arnold.

Tea was served at five o'clock in the Reception Room on the third floor.

One thousand and eighty-sixth Meeting.

DECEMBER 10, 1919.— STATED MEETING.

The Academy met at its House at 8.15 P. M.

The PRESIDENT in the Chair.

Thirty-three Fellows and one guest were present.

The Transactions of the last Meeting were read and approved.

The Corresponding Secretary presented a letter from Alexis Carrel, accepting Fellowship.

The Corresponding Secretary reported the action of the Council appointing G. R. Agassiz to be Chairman and W. T. Sedgwick to be a member of the House Committee.

The President announced the receipt of a letter of acknowledgment from the editor of "Nature" for congratulations sent on the occasion of its jubilee.

The President announced the death of the following Fellows: Henry Lee Higginson, Class III., Section 4; Frederic Pike Stearns, Class I., Section 4; Thomas Franklin Waters, Class III., Section 3.

C. H. Haskins read the following report for the Committee on the proposed American Council of Learned Societies devoted to Humanistic Studies:

As Chairman of the Committee of the American Academy of Arts and Sciences to which the proposed constitution of the American Council of Learned Societies was referred, I beg to report that the Committee held a meeting 12 November, and unanimously voted to recommend to the Academy the ratification of the covenant and constitution as submitted in print by the conference on 19 September 1919.

It was, *Voted*, That the Academy accept and ratify the covenant and constitution proposed and submitted for such a Council, thereby assuming a place as one of the constituent societies.

The Corresponding Secretary reported that the Council of the Academy had authorized the President to appoint two representatives of the Academy to attend the first meeting of the Council of Learned Societies, and had passed a vote expressing the hope that a better term than "Humanistic" might be found for use in the name of the new Council.

It was, *Voted*, That the Academy defray the expenses of the two delegates to this first meeting.

The following Communication was presented:

Professor William E. Ritter. "The Common Ground of Three Domains of Knowledge, frequently called the Exact, the Descriptive, and the Humanistic Sciences."

Dr. Francis H. Williams presented a brief paper on a possible cause of the Aurora through the action of the wind in a magnetic field.

In the course of the discussion which followed Professor Elihu Thomson presented two letters describing a well-observed case of globular lightning, and Professor Ephraim Emerton described two cases actually seen by him.

The following paper was presented by title:—

"The Specific Heat of Ammonia." By H. A. Babcock. Presented by Henry Crew.

The Meeting was then dissolved.

One thousand and eighty-seventh Meeting.

JANUARY 14, 1920.— STATED MEETING.

The Academy met in its House at 8.15 P. M.

VICE-PRESIDENT THOMSON in the Chair.

Forty-one Fellows and one guest were present.

The Transactions of the last Meeting were read and approved.

The Corresponding Secretary presented a biographical notice of Frederick Remsen Hutton by L. S. Marks.

The Chair announced the death of the following Fellows: Louis Valentine Pirsson, Class II., Section 1; Sir William Osler, Bart., Class II., Section 4; Franklin Carter, Class III., Section 2.

The following Communication was presented:

Dr. Louis A. Bauer. "Observations of the Total Solar Eclipse, May 29, 1919, at Cape Palmas, Liberia, and at other Stations."

A discussion followed.

The Meeting was then dissolved.

One thousand and eighty-eighth Meeting.

JANUARY 31, 1920.— OPEN MEETING.

An Open Meeting was held at the House of the Academy from four to six o'clock.

The PRESIDENT in the Chair.

There were about one hundred Fellows and guests, including ladies, present.

Professor Roland B. Dixon of Harvard University spoke on Western Thibet and the Development of Central Asia with illustrations from lantern slides.

Tea was served at five o'clock in the Reception Room on the third floor.

One thousand and eighty-ninth Meeting.

FEBRUARY 11, 1920.— STATED MEETING.

The Academy met at its House at 8.15 P. M.

The PRESIDENT in the Chair.

Thirty-nine Fellows and one guest were present.

The Transactions of the last two Meetings were read and approved.

The Corresponding Secretary presented a letter from Endicott Peabody resigning Fellowship; and a biographical notice of Pasquale Villari by W. R. Thayer.

On the recommendation of the Council, it was,

Voted, That $300 be appropriated from the General Fund for General-and-Meeting Expenses.

The Council recommended the Amendment of the Statutes to provide for the appointment of a Standing Committee on Biographical Notices which shall be responsible for the preparation of such notices and shall have discretion as to their length, referring also to such other notices as may be conveniently accessible.

Voted, That in accordance with the Statute the recommendation be referred to a committee for report.

The President announced the death of the following Fellows:

Richard Cockburn Maclaurin, Class I., Section 2 (Physics); Elmer Ernest Southard, Class II., Section 4 (Medicine and Surgery).

The President announced the appointment of Professor C. B. Gulick for two years and Professor F. N. Robinson for four years to represent the Academy as members of the American Council of Learned Societies Devoted to Humanistic Studies.

The following Communications were presented and discussed:

Professor George H. Parker. "The Growth and Significance of the Nervous System."

Professor Charles R. Lanman. "The Arrangement of the Ancient Hindu Alphabet, and its Scientific Basis in Phonetics and Anatomy."

The following papers were presented by title:—

"A Monograph of the American Frogs of the Genus Rana." By G. A. Boulenger. Presented by J. B. Woodworth.

"Some Geometric Investigations on the General Problems of Dynamics." By Joseph Lipka.

"Contribution to the General Kinetics of Material Transformations." By A. J. Lotke. Presented by Irving Fisher.

"Rotations in Space of Even Dimensions." By H. B. Phillips and C. L. E. Moore.

"Orbits Resulting from Assumed Laws of Motion." By A. Searle.

The Meeting was then dissolved.

One thousand and nintieth Meeting.

MARCH 10, 1920.— STATED MEETING.

The Academy met at its House at 8.15 P. M.

The PRESIDENT in the Chair.

Thirty-five Fellows and three guests were present.

The Transactions of the last Meeting were read and approved.

The President appointed the following Councillors as Nominating Committee:

G. P. Baxter, of Class I.

W. M. Wheeler, of Class II.

A. C. Coolidge, of Class III.

On recommendation of the Council, the following appropriations were made for the ensuing year:—

From the income of the General Fund, $8,100, to be used as follows:—

for General and Meeting expenses	$1,300.00
for Library expenses	2,800.00
for Books, periodicals and binding	1,200.00
for House expenses	2,200.00
for Treasurer's expenses	600.00

From the income of the Publication Fund, $4,655.24, to be used for publication.

From the income of the Rumford Fund, $3,343.26, to be used as follows:—

for Research	$1,000.00
for Publication	600.00
for use at the discretion of the Committee	1,743.26

From the income of the C. M. Warren Fund, $2,500, to be used at the discretion of the Committee.

A Biographical Notice of W. L. Hooper by A. C. Lane was presented.

The President announced that he had appointed as the Committee to report on the amendment of the Statutes proposed at the last Meeting, A. G. Webster, Barrett Wendell and A. C. Lane.

The President stated that the Council intends to bring forward at the next Meeting of the Academy a request for instructions with regard to the election of women as Fellows of the Academy.

Voted, That the Publication Committee be requested to report what may be done toward providing for the continued publication of learned works in series, the future of which is made precarious or impossible by reason of conditions in Europe.

The following Communication was read and discussed:

Professor Reginald A. Daly. "The Deep Sea Islands of the Pacific."

The following papers were presented by title:—

"The Springfield Rifle and the Leduc Formula." By A. G. Webster.

"On Sabine's Method in Architectural Acoustics without the Use of the Ear." By A. G. Webster.

The Meeting was then dissolved.

One thousand and ninety-first Meeting.

APRIL 14, 1920.— STATED MEETING.

The Academy met at its House at 8.15 P. M.

The PRESIDENT in the Chair.

Seventy-one Fellows and three guests were present.

The Transactions of the last Meeting were read and approved.

The Corresponding Secretary presented for the Council an invitation from the Wisconsin Academy of Sciences, Arts, and Letters to the exercises in commemoration of the fiftieth anniversary of its founding to be held on the 23d of April, 1920, at Madison, Wisconsin, and stated that the Council had voted to arrange for the representation of the Academy at this meeting.

The President announced the death of the following Fellow: Andrew McFarland Davis, Class III., Section 3 (Political Economy and History).

The President announced the gift from Boylston A. Beal Esq., of a painting by Tilton, representing the Bay of Naples, and it was

Voted, That the thanks of the Academy be sent to Mr. Beal for his welcome and valued gift.

The President stated that the Council thought it wise to postpone for discussion at a later meeting the question of the election of women to be Fellows of the Academy, and it was

Voted, That the Persident be authorized to appoint a Committee of three to consider the whole question of elections to the Academy.

Professor Webster moved that it is the sense of those members of the Academy here present that no objection lies against the election of women to be Fellows of the Academy.

Voted, To lay this motion on the table.

The following Communications were read and discussed:

Professor George W. Pierce. "Submarine Detection and Acoustical Aids to Navigation."

Professor Frank W. Taussig. "The Economic Revolution now in Process."

The Meeting was then dissolved.

One thousand and ninety-second Meeting.

MAY 12, 1920.— ANNUAL MEETING.

The Academy met at its House.

The PRESIDENT in the Chair.

Thirty-six Fellows and one guest were present.

The Transactions of the last Meeting were read and approved.

The following report of the Council was presented:—

Since the last report of the Council, there have been reported the deaths of sixteen Fellows: William Brewster, Franklin Carter, A. McF. Davis, W. G. Davis, W. G. Farlow, F. B. Gummere, H. L. Higginson, Abraham Jacobi, W. R. Livermore, R. C. Maclaurin, Sir William Osler, L. V. Pirsson, E. E. Southard, F. P. Stearns, T. F. Waters, C. H. Williams; and three Foreign Honorary Members: Emil Fischer, M. G. Retzius, J. W. Strutt, Baron Rayleigh.

Twenty-five Fellows and nine Foreign Honorary Members were elected by the Council and announced to the Academy in May, 1919, of which number, one has declined Fellowship. Two Fellows have resigned.

The roll now includes 521 Fellows and 68 Foreign Honorary Members (not including those elected in April 1920).

The annual report of the Treasurer, Henry H. Edes, was read, of which the following is an abstract:—

GENERAL FUND.

Receipts.

Balance, April 1, 1919	$8,360.34	
Investments	4,037.24	
Assessments	3,520.00	
Admissions	120.00	
Sundries	206.20	$16,243.78

Expenditures.

Expense of Library	$3,508.73	
Expense of House	2,058.17	
Treasurer	302.85	
Assistant Treasurer	250.00	
General Expense of Society	1,011.03	
President's Expenses	101.02	
Interest on Bonds bought	22.00	
Income transferred to principal	320.52	$7,574.32
Balance, April 1, 1920		8,669.46
		$16,243.78

RUMFORD FUND.

Receipts.

Balance, April 1, 1919	$4,064.23	
Investments	3,758.51	
Grant returned	78.56	$7,901.30

Expenditures.

Research	$3,100.00	
Periodicals and binding	51.52	
Sundries	23.90	
Income transferred to principal	167.80	$3,343.22
Balance, April 1, 1920		4,558.08
		$7,901.30

C. M. WARREN FUND.

Receipts.

Balance, April 1, 1919	$4,776.13	
Investments	1,143.35	
Grant returned	111.61	$6,031.09

Expenditures.

Research	$1,050.00	
Vault rent, part	3.00	
Income transferred to principal	53.04	$1,106.04
Balance, April 1, 1920		4,925.05
		$6,031.09

PUBLICATION FUND.

Receipts.

Balance, April 1, 1919	$1,461.50	
Appleton Fund investments	1,181.35	
Centennial Fund investments	2,505.00	
Author's Reprints	33.39	
Sale of Publications	345.86	$5,527.10

Expenditures.

Publications	$1,879.42	
Vault rent, part	10.00	
Income transferred to principal	163.07	$2,052.49
Balance, April 1, 1920		3,474.61
		$5,527.10

FRANCIS AMORY FUND.

Receipts.

Investments	$1,324.08	$1,324.08

Expenditures.

Publishing statement	64.90	
Interest on bonds bought	28.25	
Income transferred to principal	1,230.93	$1,324.08

May 12, 1920.

The following reports were also presented:—

Report of the Library Committee.

The Librarian begs to report for the year 1919–1920, as follows:

During the year 1919–20, 65 books have been borrowed by 22 persons, including 17 Fellows, and 1 library. As usual many books have been consulted. All books taken out have been satisfactorily accounted for.

The number of books on the shelves at the time of the last report was 36,237. 796 volumes have been added, making the number now on the shelves 37,033. This includes 25 purchased from the income of the General Fund, 9 from that of the Rumford Fund, and 762 received by gift or exchange.

The books selected from the legacy of the late Professor William Watson, 584 in number, have now all been catalogued by Miss Wyman and added to the shelves. Pamphlets have also been placed alphabetically by authors in the pamphlet boxes, uncatalogued. The remainder of the books and pamphlets of the legacy have been sent to the Harvard Library, for their selection, those then remaining to be passed on to the Institute of Technology Library.

The expenses charged to the Library during the financial year are:—

Salaries	$2,797.03
Binding:—	
General Fund	533.58
Rumford Fund	30.75
Purchase of periodicals and books: –	
General Fund	116.37
Rumford Fund	20.77
Miscellaneous	21.75
Total	$3,520.25

A. G. Webster, *Librarian.*

May 12, 1920.

Report of the Rumford Committee.

The Rumford Committee respectfully reports as follows:—

The Committee organized by the election of Charles R. Cross, Chairman, and Arthur G. Webster, Secretary.

During the past year grants in aid of research have been made as follows:—

October 8, 1919, to Professor Frances G. Wick in aid of her researches on the Phosphorescence of Hexagonite and of Fluorite at Ordinary and Low Temperatures 300

To Professor Robert W. Wood for the continuation of his optical investigations (additional) 350

December 10, 1919, to Professor Frederick G. Keyes in aid of his research on the Heats of Neutralization at different temperatures 300

January 14, 1920, to Professor Frederick A. Saunders, in aid of his research on Spectral Lines (additional) 150

To Professor David L. Webster in aid of his researches on X-Ray Spectra (additional) 350

March 10, 1920, to Professor Julius Stieglitz in aid of the publication of Marie's Tables of Constants (additional) . . . 250

April 14, 1920, to Professor Leonard R. Ingersoll in aid of his research on the Polarizing Effect of Diffraction Gratings . 150

To Professor Harrison M. Randall in aid of his research on the Structure of Spectra in the Infra-Red (additional) . . . 500

To Professor Arthur G. Webster in aid of his research on a new Method in Pyrodynamics and Practical Interior Ballistics (additional) 500

May 12, 1920, to Professor Norton A. Kent in aid of his research on Spectral Lines (additional) 200

Reports of progress in their respective researches have been received from the following persons:— C. G. Abbot, W. M. Baldwin, R. T. Birge, P. W. Bridgman, W. W. Campbell, A. L. Clark, D. F. Comstock (research finished), H. Crew, F. Daniels, H. N. Davis (research finished), A. L. Foley (research finished), E. B. Frost, R. C. Gibbs, H. P. Hollnagel, H. L. Howes, L. R. Ingersoll, N. A. Kent, F. E.

Krester, F. G. Keyes, L. V. King (research discontinued; appropriation returned), C. A. Kraus, E. Kremers, R. A. Millikan, R. S. Minor, C. L. Norton, F. Palmer, Jr., J. A. Parkhurst, H. M. Randall, T. W. Richards, F. K. Richtmyer, F. A. Saunders, W. O. Sawtelle, A. W. Smith, B. J. Spence (research finished), J. Stieglitz, L. T. E. Thompson, O. Tugman, F. W. Very, A. G. Webster, D. L. Webster, F. G. Wick, R. W. Wood.

A paper by Henry A. Babcock, the Specific Heat of Ammonia, will be published shortly with aid from the Rumford Fund in the forthcoming volume of the Proceedings of the Academy, Vol. 55.

Toward the expense of publishing this paper the Committee on April 14 voted to appropriate a sum not exceeding four hundred and fifty dollars.

On April 14 it was voted for the first time, unanimously, and on May 12 for the second time, unanimously, to recommend to the Academy the award of the Rumford Premium to Irving Langmuir for his researches in thermionic and allied phenomena.

CHARLES R. CROSS, *Chairman.*

May 12, 1920.

REPORT OF THE C. M. WARREN COMMITTEE.

The C. M. Warren Committee begs to submit the following report:

The Committee had at its disposal at the time of the last report to the Aacdemy $2,821.50. In December, 1919, Dr. J. H. Ellis returned to the Committee the sum of $111.61 representing the balance of a grant made to him in November, 1917, which was not fully utilized. On May 7, 1920, Professor G. H. Burrows returned the sum of $250 from the grant made to him in 1913, as he has found it impracticable to carry on the investigations for which the grant was originally made. In March, 1920, the Academy placed at the disposal of the Committee the sum of $2,500.

During the year two grants have been made, both to Professor Charles A. Kraus of Clark University, Worcester. The first was a grant of $500 made in June, 1919, for the investigation of properties of water at high temperatures. The second was a grant of $500

made in April, 1920, for the study of compounds which are formed in liquid ammonia solution.

In common with the Committees or Trustees in charge of other funds for research your Committee has received comparatively few applications within the past two or three years. There are indications of increasing interest in such funds, and there is expectation that several applications for grants from the Warren Fund will be made in the near future.

The unexpended balance in the hands of the Committee at the present time is $4,683.11.

Professor E. L. Mark reports that the results of the study of sea water, for which an appropriation from the Warren Fund was made, have been published.

Professor R. E. Wilson reports that his investigations of the phenomena accompanying the hydrolysis of certain organic compounds have been completed and that the results will shortly be published. Professor W. D. Harkins reports that the results of his investigations of the surface energy relations of mercury, of adhesion and negative surface energy, and of the entropy principle concerning the change of molecular kinetic into molecular potential energy have appeared in the Proceedings of the National Academy of Sciences. Others to whom grants have been made have sent in satisfactory reports of progress.

H. P. Talbot, *Chairman.*

May 12, 1920.

Report of the Publication Committee.

The Committee of Publication reports as follows, for the period from April 1, 1919 to March 31, 1920:

During this period there have been issued No. 5 of Vol. 54 of the Proceedings, and Nos. 1, 2, 3, and 4 of Vol. 55. The number of papers by Fellows of the Academy published in its Proceedings has, as last year, been below the average pre-war figure, and it has therefore been possible under the rules to print several papers of value by authors who are not Fellows.

The financial statement follows:

Balance on hand April 1, 1919	$1,171.77	
Appropriations for 1919–20	4,860.08	
Sales of Publications	345.86	
Sales of authors' reprints	33.39	6,411.10
Expenses		1,879.42
Balance on hand March 31, 1920		4,531.68

Respectfully submitted,

LOUIS DERR, *Chairman.*

May 12, 1920.

REPORT OF THE HOUSE COMMITTEE.

The House Committee submits the following report for 1919–20:—

With the balance of $124.35 left from last year, an appropriation of $2,000, and $45 received from other societies for the use of the rooms, the Committee has had at its disposal the sum of $2,169.35. The total expenditure has been $2,103.17, leaving an unexpended balance on April 1, 1920, of $66.18. The expenditure has been as follows:—

Janitor		$831.00
Electricity	A. Light	151.12
	B. Power	69.62
Coal	Furnace	697.50
	Water Heater	61.20
Care of elevator		49.32
Gas		22.80
Water		8.00
Telephone		65.79
Ice		24.00
Janitor's materials		43.37
Upkeep		69.55
Ash tickets		9.90
Total expenditure		$2,103.17

The amount of $45 contributed by other societies for the use of the building leaves the net expense of the House $2,058.17.

Meetings have been held as follows:—

The Academy	
Regular meetings	8
Open meetings	2
The Physics Section	6
American Antiquarian Society	1
Archeological Institute	1
Colonial Dames	1
Colonial Society	4
Geological Society of Boston	4
Harvard Biblical Club	3
Harvard-Technology Chemical Club	4
Society of Landscape Architects	1
	35

The rooms on the first floor have been used for Council and Committee meetings.

The Committee expended about $200 more than last year which is accounted for in the increased cost of existence.

The wife of the late janitor, Mrs. Reardon, who was retained in the service of the Academy, has sought employment elsewhere, and the janitor's rooms are now occupied by the present janitor and his family.

Respectfully submitted,

G. R. Agassiz, *Chairman.*

May 12, 1920.

It was

Voted, That the thanks of the Academy be given to Mr. Agassiz, the retiring Chairman of the House Committee.

On the recommendation of the Treasurer, it was

Voted, That the Annual Assessment be $10.00.

On the recommendation of the Council, it was

Voted, To appropriate from the income of the General Fund the sum of $650.00 for the use of the Treasurer on account of additional insurance.

The Corresponding Secretary reported that the Special Committee on the amendment to the Statutes to provide for a Standing Committee on Biographical Notices having made an informal report, the Council had authorized the President to appoint a Special Committee to arrange for the preparation of Biographical Notices and to advise the Academy at a later date on a permanent plan with regard to this matter.

On the recommendation of the Rumford Committee, it was

Voted, To award the Rumford Premium to Irving Langmuir for his researches in thermionic and allied phenomena.

The annual election resulted in the choice of the following officers and committees:—

THEODORE W. RICHARDS, *President.*
ELIHU THOMSON, *Vice-President for Class I.*
HARVEY CUSHING, *Vice-President for Class II.*
GEORGE F. MOORE, *Vice-President for Class III.*
HARRY W. TYLER, *Corresponding Secretary.*
JAMES H. ROPES, *Recording Secretary.*
HENRY H. EDES, *Treasurer.*
ARTHUR G. WEBSTER, *Librarian.*

Councillors for Four Years.

FORRIS J. MOORE, *of Class I.*
REID HUNT, *of Class II.*
EPHRAIM EMERTON, *of Class III.*

Finance Committee.

HENRY P. WALCOTT, JOHN TROWBRIDGE,
HAROLD MURDOCK.

Rumford Committee.

CHARLES R. CROSS, THEODORE LYMAN,
ARTHUR G. WEBSTER, LOUIS BELL,
ELIHU THOMSON, PERCY W. BRIDGMAN,
HARRY M. GOODWIN.

C. M. Warren Committee.

HENRY P. TALBOT, WALTER L. JENNINGS,
CHARLES L. JACKSON, WILLIAM H. WALKER,
GREGORY P. BAXTER, ARTHUR D. LITTLE,
JAMES F. NORRIS.

Publication Committee.

LOUIS DERR, *of Class I.*
HERBERT V. NEAL, *of Class II.*
ALBERT A. HOWARD, *of Class III.*

Library Committee.

HARRY M. GOODWIN, *of Class I.*
THOMAS BARBOUR, *of Class II.*
WILLIAM C. LANE, *of Class III.*

House Committee.

JOHN O. SUMNER, WILLIAM T. SEDGWICK,
WM. STURGIS BIGELOW.

Committee on Meetings.

THE PRESIDENT, GEORGE H. PARKER,
THE RECORDING SECRETARY, EDWIN B. WILSON,
GEORGE F. MOORE.

Auditing Committee.

GEORGE R. AGASSIZ, JOHN E. THAYER.

The Council reported that the following gentlemen were elected members of the Academy:—

Harlow Shapley, of Pasadena, as Fellow in Class I., Section 1. (Mathematics and Astronomy.)

Jacques Salomon Hadamard, of Paris, as Foreign Honorary Member in Class I., Section 1. (Mathematics and Astronomy.)

Harry Monmouth Smith, of Brookline, as Fellow in Class I., Section 3. (Chemistry.)

Theodore Harwood Dillon, of Boston, as Fellow in Class I., Section 4. (Technology and Engineering.)

Frederick Law Olmsted, of Brookline, as Fellow in Class I., Section 4. (Technology and Engineering.)

William T. Bovie, of Milton, as Fellow in Class II., Section 3. (Zoölogy and Physiology.)

Benjamin Preston Clark, of Boston, as Fellow in Class II., Section 3. (Zoölogy and Physiology.)

Cecil Kent Drinker, of Boston, as Fellow in Class II., Section 3. (Zoölogy and Physiology.)

William Lyman Underwood, of Belmont, as Fellow in Class II., Section 3. (Zoölogy and Physiology.)

Maurice Caullery, of Paris, as Foreign Honorary Member in Class II., Section 3. (Zoölogy and Physiology.)

Walter Eugene Clark, of Chicago, as Fellow in Class III., Section 2. (Philology and Archaeology.)

Franklin Edgerton, of Philadelphia, as Fellow in Class III., Section 2. (Philology and Archaeology.)

Clark Wissler, of New York, as Fellow in Class III., Section 2. (Philology and Archaeology.)

Charles Howard McIlwain, of Cambridge, as Fellow in Class III., Section 3. (Political Economy and History.)

John Ellerton Lodge, of Boston, as Fellow in Class III., Section 4. (Literature and the Fine Arts.)

The following Communication was presented:—

Hon. William C. Wait. "The Part of the People in the Administration of the Law."

The following paper was presented by title:

"Acoustic Impedance and its Measurement," by A. E. Kennelly and K. Kurokawa.

The Meeting was then dissolved.